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A. CLASSIFICATIONOF SUBJECT MATTER

Int.Cl7 H01L33/00, H01S5/323

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl7 H01L33/00, H01S5/323

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Japanese Utility Model Gazette 1922-1996, Japanese Publication of Unexamined Utility Model Applications 1971-2005, Japanese Registered Utility Model Gazette 1994-2005, Japanese Gazette Containing the Utility Model 1996-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Further documents are listed in the continuation of Box C.

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
·×	JP 2003-303779 A (SHOWA DENKO K.K.)	1-4
Y	2003.10.24, column 37-43(Family:none)	5-14
Y	JP 2003-22971 A(SHOWA DENKO K.K.) 2003.1.24, column 25,30-31(Family:none)	5-7,12-14
Y	JP 2003-229601 A(SHOWA DENKO K.K.) 2003.8.15, column 20(Family:none)	8-14
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	<u> </u>	<u>.</u>

*	Special categories of cited documents:	"T"	later document published after the international filing date or			
"A"	document defining the general state of the art which is not considered to be of particular relevance		priority date and not in conflict with the application but cited understand the principle or theory underlying the invention			
"E"	national filing date		document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an			
"L"			inventive step when the document is taken alone			
	is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention of be considered to involve an inventive step when the document		ntion cannot	
"O"	document referring to an oral disclosure, use, exhibition or other means		combined with one or more other such documents, suc combination being obvious to a person skilled in the art			
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family			
Date of the actual completion of the international search			Date of mailing of the international search report			
18.01.2005			01. 2. 2005			
Name and mailing address of the ISA/JP		Auth	orized officer	277	0026	
Japan Patent Office		TC	MOHISA TSUCHIYA	2K	8826	
onput a notice Other						

See patent family annex.

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